

303 - 376

**Work Order ID 108041**

October-07-13 9:07:11 AM

\*108041\*

Page 1

Item ID: D4043-9

**Revision ID:**

**Item Name:** Bushing

**Start Date:** 10/07/13

**Required Date:** 10/07/13

#### Reference:

#### **Approvals:**

### Process Plan: MLJ

Date: 13-10-08 Tooling:

\*N900040100\*

Setup S

start \*NS1\*

Stop \*NS2\*

**Cust Item ID:**

**Customer:**

Run S

start \*NR1\*

Stop \*NR2\*

NCR: Yes / No

# **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

OA Closed: Date:

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____  NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	General			Bend	General			Grain	General		
Centre Not Concentric to O/S				BOM/Route				Hardware	Ovalized	Pressure/Forced	
Cracks				Broken/Damaged				Inspection Incomplete	Over/Under tolerance	Temperature/Cure	
Crushed/Crimped				Burrs				Instructions Incomplete/Unclear	Part Incorrect	Weld	
Cuffs				Contamination				Maintenance	Part Lost/Missing	Wrong Stock Pulled	
Heat Treat				Countersink				Mislabeled	Part Moved		
Inspection Strip in Tube				Cut Too Short				Misread	Positioned Wrong		
Ripples in Bend				Drill Holes				Offset	Power Loss/Surge		
Torque Waves in Extrusion				Drawing				Out of Calibration			
Turning Sequence				Finish				Out of Sequence			
Wave/Twist in Tube				Folio				Outside Dimensions			

**Work Order ID 108041**

October-07-13 9:07:11 AM

**\*108041\***

Page 2

Item ID: D4043-9

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Item Name: Bushing

Stop

**\*NS2\***

Start Date: 10/07/13 Start Qty: 20.00

**\*20\***

Cust Item ID:

Required Date: 10/07/13 Req'd Qty: 20.00

**\*20\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

**\*120\***

QC

Quality Control

QC8- Inspect parts - second check

0.00

13-10-23

0.00

20

0

DAS  
13  
9-89

130

**\*130\***

Packaging

Packaging

Identify as per dwg & Stock Location: JTO88 0.00

0.00

20x DAS  
28 9-89 13-10-23

140

**\*140\***

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

J/13-10-23

AB 10-23

NCR: Yes / No

# **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: Date:

Date:

**QA Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Date:

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS										
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>									
Part No. _____																
NCR No. _____																
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector							
Doc/Data																
Equip/Tooling																
Operator																
Material																
Setup																
Other																
Process																
Supplier																
Training																
Unapproved																
FAULT CATEGORY																
Landing Gear				General												
Bending	General			Bend	General			Grain	General			Ovalized	General			Pressure/Forced
Centre Not Concentric to O/S				BOM/Route				Hardware				Over/Under tolerance				Temperature/Cure
Cracks				Broken/Damaged				Inspection Incomplete				Part Incorrect				Weld
Crushed/Crimped				Burrs				Instructions Incomplete/Unclear				Part Lost/Missing				Wrong Stock Pulled
Cuffs				Contamination				Maintenance				Part Moved				
Heat Treat				Countersink				Mislabeled				Positioned Wrong				
Inspection Strip in Tube				Cut Too Short				Misread				Power Loss/Surge				
Ripples in Bend				Drill Holes				Offset								
Torque Waves in Extrusion				Drawing				Out of Calibration								
Turning Sequence				Finish				Out of Sequence								
Wave/Twist in Tube				Folio				Outside Dimensions								

# Picklist Print

October-07-13 9:07:11 AM

Page 1

Work Order ID: 108041

Parent Item: D4043-9

Parent Item Name: Bushing

Start Date: 10/07/13

Required Date: 10/07/13

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A NEW ISSUE 10-01-06 JLM VERIFIED BY:DD IPP Rev:B as per dwg revA  
DD 10.02.18 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.375 303 Round Bar 0.375"		Purchased	No			100	f	20.1600	0.052	1.094736			

Location	Loc Qty	Loc Code
MAT028	20.16	
115806	2.422	
*121157	17.738	

10095 DAS  
44 13/10/23  
9-89

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>					
NCR No. _____	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>					
	Work Order Update <input type="checkbox"/>		Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Other		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	

DART AEROSPACE LTD	Work Order:	108041
Description: Bushing	Part Number:	D4043-9
Inspection Dwg: D4043 Rev: A		Page 1 of 1

# **FIRST ARTICLE INSPECTION CHECKLIST**

Measured by:	<b>44</b>	Audited by:	<b>53</b>	Preliminary Approval:	N/A
Date:	13/10/23	Date:	13-10-23	Date:	N/A

<b>Rev</b>	<b>Date</b>	<b>Change</b>	<b>Revised by</b>	<b>Approved</b>
A	10.08.03	New Issue	KJ	MM

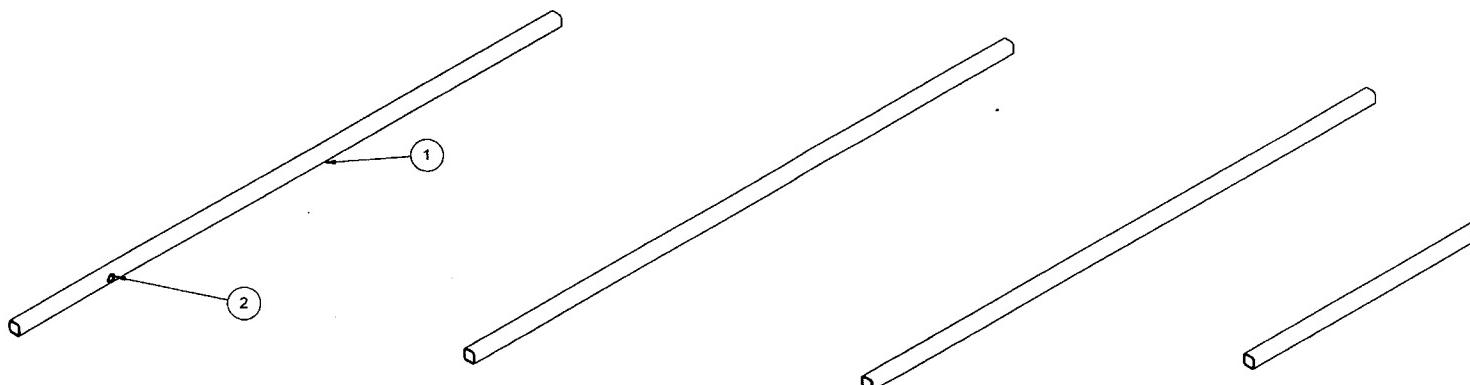
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ITEM	QTY -041	P/N	DESCRIPTION
	X	D4043-041	RIB ASSEMBLY
1	1	D4043-1	RIB
2	1	D4043-9	BUSHING



**D4043-041 RIB ASSEMBLY**

**D4043-3 RIB**

D4043-5 RIB

D4043-7 RIF

D4043-9 BUSHING

108041 MCJ  
13-10-08

1

RELEASED  
2010-02-16  
MP

A	NEW ISSUE		RF	10.01.29
REV.	DESCRIPTION		BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b>		
DRAWN	RF	HAWKSBUARY, ONTARIO, CANADA		
CHECKED	<i>DP</i>	DRAWING NO.	REV. A	
MFG. APPR.	<i>DS</i>	D4043	SHEET 1 OF 4	
APPROVED	<i>MP</i>	TITLE	SCALE	
DE APPR.	<i>MM</i>	RIB ASSEMBLY	NTS	
DATE	10.01.29	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE EXPRESS WRITTEN CONSENT OF DART AEROSPACE LTD.		

WALTER PERIN SONS LTD. 1970 LTD.

108041

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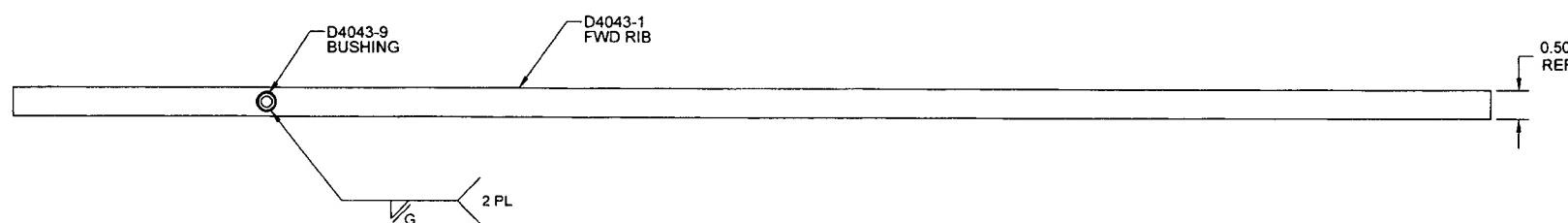
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A



### D4043-041 RIB ASSEMBLY

RELEASED  
2010-02-16  
MP

- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.60 lbs
  - 8) WELD PER DART QSI 004

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	DD	DRAWING NO.
MFG. APPR.	DD	REV. A
APPROVED	MM	D4043 SHEET 2 OF 4
DE APPR.	MM	TITLE
DATE	10.01.29	SCALE
		NTS
		RIB ASSEMBLY

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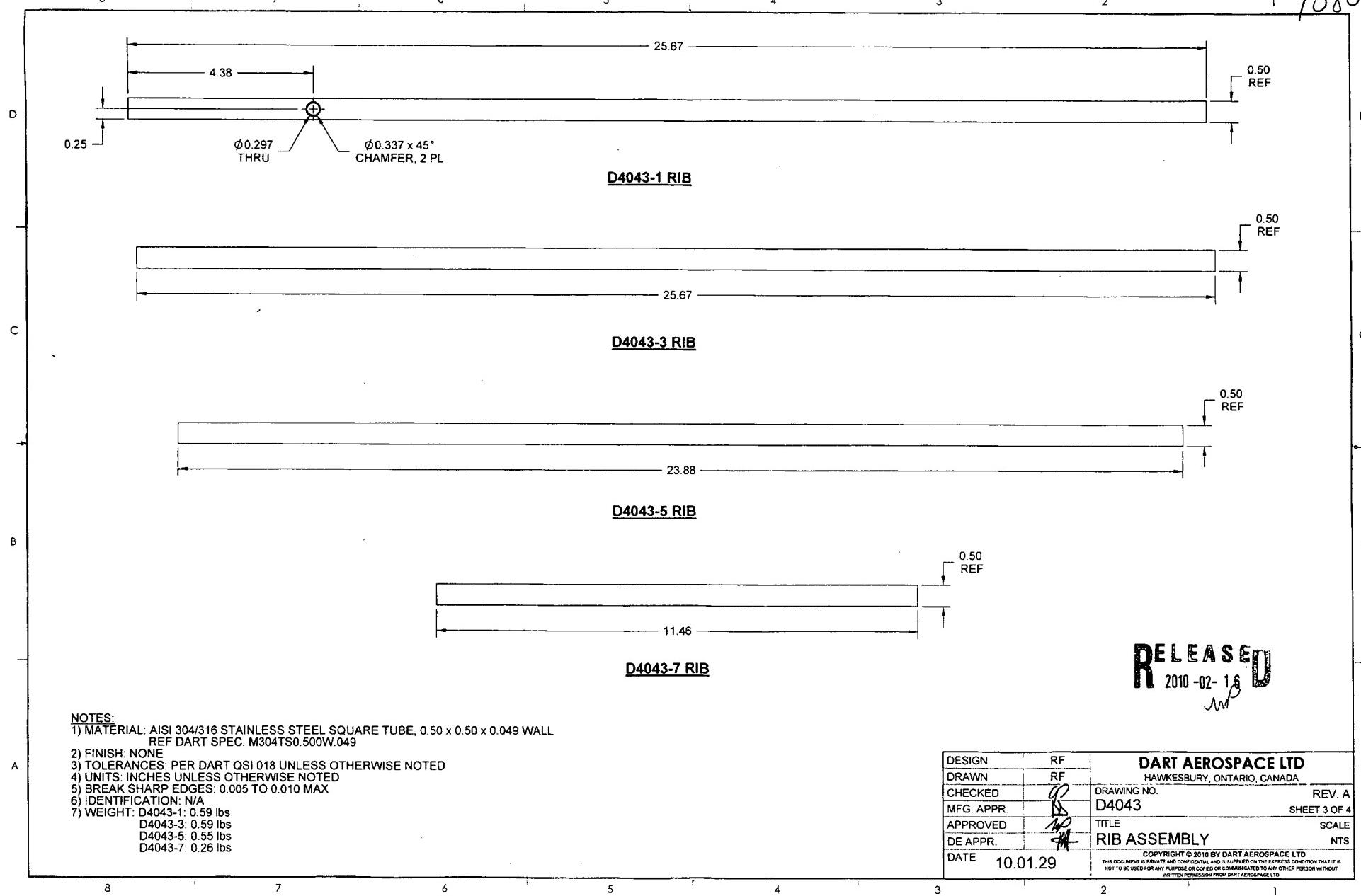
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108041



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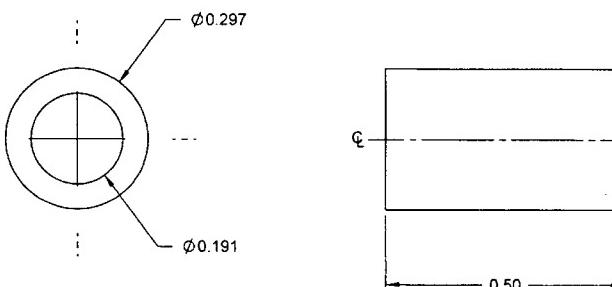
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**NOTES:**

- 1) MATERIAL: AISI 303 STAINLESS STEEL ROUND BAR  
REF DART SPEC. M303R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.006 lbs

**D4043-9 BUSHING**

**RELEASED**  
R 2010-02-16  
*M*

DESIGN	RF	<b>DART AEROSPACE LTD</b>
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>Q</i>	DRAWING NO.
MFG. APPR.	<i>DP</i>	REV. A
APPROVED	<i>MP</i>	SHEET 4 OF 4
DE APPR.	<i>MP</i>	TITLE
DATE	10.01.29	SCALE
		NTS
		RIB ASSEMBLY

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